

SRP-270 SERIES



1 STATION PRINTER

Operator's Manual

All specifications are subjected to change without notice

Warning - U.S.

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates uses, and can radiate radio frequency energy and if not installed and used according to the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Notice - Canada

This Apparatus complies with class "A" limits for radio interference as specified in the Canadian department of communications radio interference regulations.

Get appareil est conforme aux normes class "A" d'interference radio tel que specifier par ministre canadien des communications dans les reglements d'interference radio.

Caution

Some semiconductor devices are easily damaged by static electricity. You should turn the printer "OFF", before you connect or disconnect cables. This will help protect the printer against static electricity. If the printer is damaged by the static electricity, you should turn the printer OFF, and refer to your local service provider.

INTRODUCTION

The SRP-270 Roll Printers are designed for use with electronic instruments such as system ECR, POS, banking equipment, computer peripheral equipment, etc.

The main features of the printer are as follows:

1. High speed printing : 4.6 lines per seconds.
2. 2 color dot-matrix printer.
3. RS-232C(SRP-270), RS-485 serial interface (SRP-270S), Parallel interface (SRP-270P),USB interface(SRP-270U).
4. The data buffer allows the unit to receive print data even during printing.
5. Peripheral units drive circuit enables control of external devices such as cash drawer.

Please be sure to read the instruction in this manual carefully before using your new SRP-270 series.

NOTE : The power-outlet should be near the equipment and it should be easy accessible.

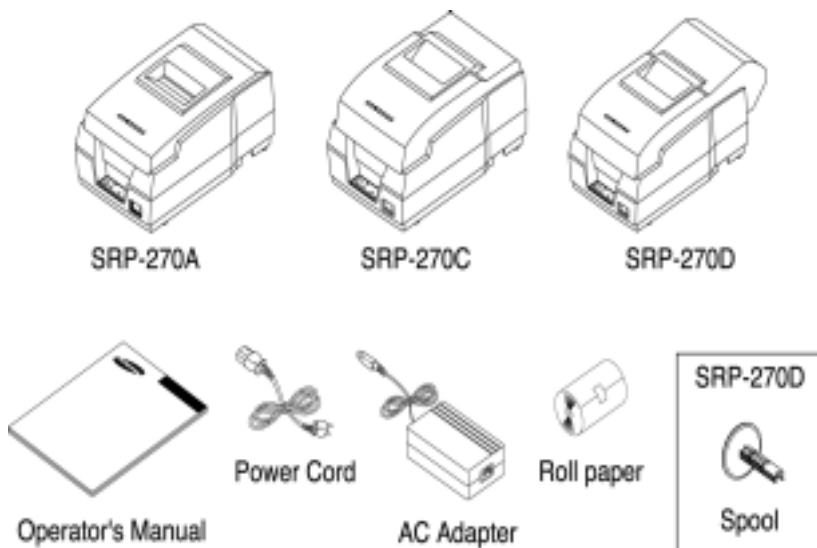
Table of Contents

- CHAPTER 1. UNPACKING 3
 - 1-1. CHECKING THE CONTENTS OF THE PRINTER BOX 3
 - 1-2. LOCATING THE PRINTER 3
 - 1-3. FUNCTIONS..... 4
- CHAPTER 2. CONNECTING THE CABLES..... 5
 - 2-1. CONNECTING THE AC ADAPTER TO THE PRINTER 5
 - 2-2. CONNECTING INTERFACE CABLE AND DRAWER 6
- CHAPTER 3. INSTALLING THE ROLL PAPER..... 7
 - 3-1. RIBBON CASSETTE INSTALLATION 7
 - 3-2. ROLL PAPER INSTALLATION..... 8
- CHAPTER 4. SETTING THE DIP SWITCHES 12
- CHAPTER 5. HEXADECIMAL DUMPING 15
- CHAPTER 6. THE SELF TEST 16
- CHAPTER 7. CODE TABLE 17
- CHAPTER 8. CONTROL COMMANDS LIST 24
- APPENDIX A 28
 - CONNECTORS 28
 - Interface Connector*..... 29
 - Drawer Connector* 31
- APPENDIX B 32
 - SPECIFICATION 32
- APPENDIX C 33
 - REMOVING JAMMED PAPER 33

Chapter 1. Unpacking

1-1. Checking the Contents of the printer box

After unpacking the unit, check that all the necessary accessories are included in the package.

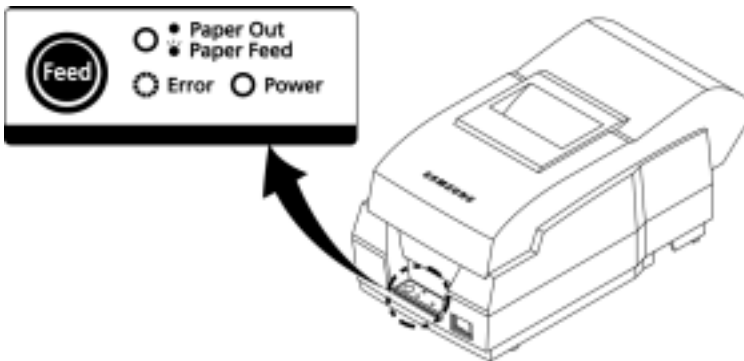


1-2. Installing the printer

- Avoid locations in direct sunlight or subject to excessive heat.
- Avoid using or storing the printer in places subject to excessive moisture.
- Do not use or store the printer in a dusty or dirty area. Avoid places subject to intense vibration or shock.
- Choose a stable and flat place for proper use of the printer.
- Make sure that there is enough space around the printer so that it can be used easily.

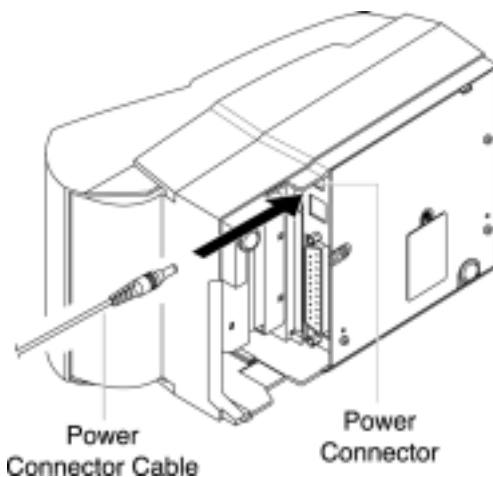
1-3. Functions

- The power switch is used to turn the printer on and off.
- The FEED button is used to feed roll paper.
- The POWER light (green) is on when the printer is turned on and is off when the printer is turned off.
- The ERROR light (red) is on when the printer is in error state.
- The Paper Out light (red) is on when the printer is in paper end.



Chapter 2. Connecting the cables

2-1. Connecting the AC adapter to the printer

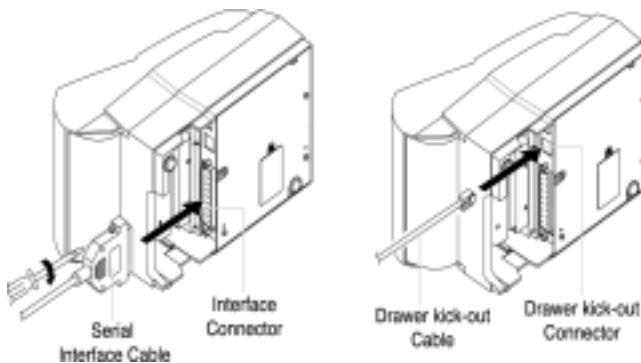


- 1). Make sure that the printer is turned off.
- 2). CHECK the label on the AC adapter to make sure the voltage required by the AC adapter matches that of your electrical outlet.
- 3). Plug the DC cord connector into the printer's power connector.
- 4). Plug the AC adapter power cord into the wall outlet.

2-2. Connecting Interface Cable and Drawer Cable to the printer

Connect the Host Computer(POS/ECR) to the printer using an interface cable that matches the specifications of the printer and the Host computer(POS/ECR). Be sure to use a drawer that matches the printer's specification.

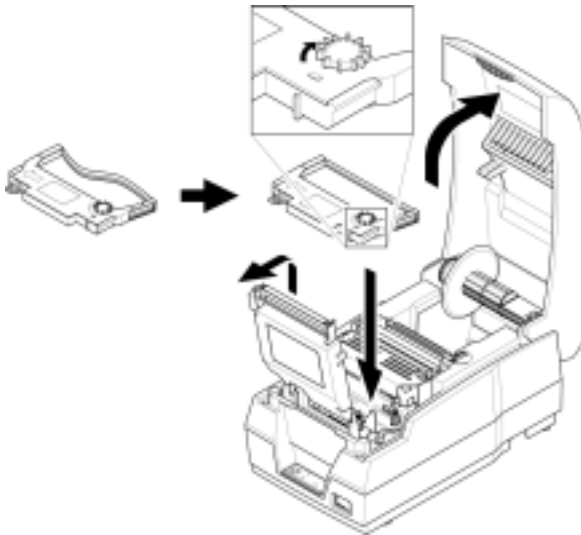
- 1). Turn off both the printer and the Host computer(POS/ECR).
- 2). Plug the serial interface cable connector into the printer's interface connector, then tighten the screws on both sides of the connector. In case of the parallel interface, squeeze the wire clips on the printer together until they lock in place on both sides of the connector.
- 3). Plug the drawer cable into the drawer kick-out connector on the back of the printer next to the interface connector. Do not connect a telephone line to the drawer kick-out connector; otherwise the printer and the telephone line may be damaged.
- 4). Turn on the Printer and Host computer(POS/ECR).



Chapter 3. Installing the roll paper

3-1. Ribbon Cassette Installation

- 1). Before inserting the ribbon cassette, turn the knob clockwise to prevent twisting the ribbon.
- 2). Insert the ribbon cassette as shown below and pay particular attention to the placement of the ribbon behind the Print Head.
- 3). During inserting the ribbon cassette, turn the knob clockwise again to make sure the ribbon moves freely in the cassette.

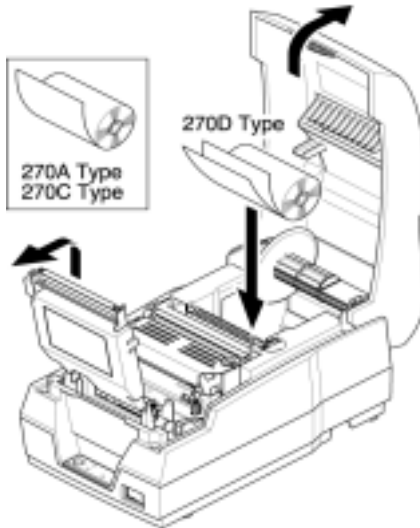


NOTE : Malfunctions and other problems may arise if other than pecified ribbon cassettes are used in the printer. The Warranty may be voide if other than specified ribbon cassettes are used. Contact your deale or place of purchase for more information about proper ribbon cassettes.

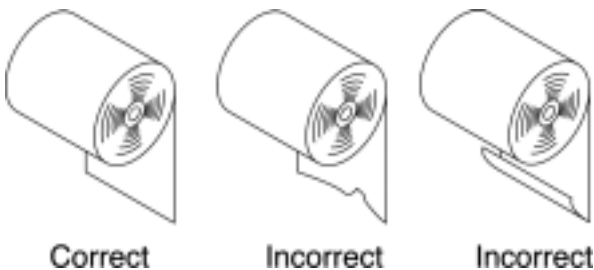
3-2. Roll Paper Installation

Be sure to use roll paper that matches the printer's specifications.

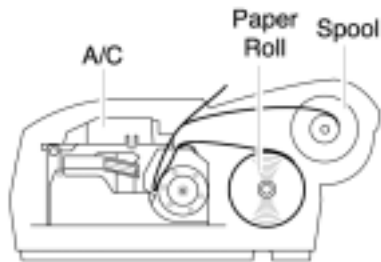
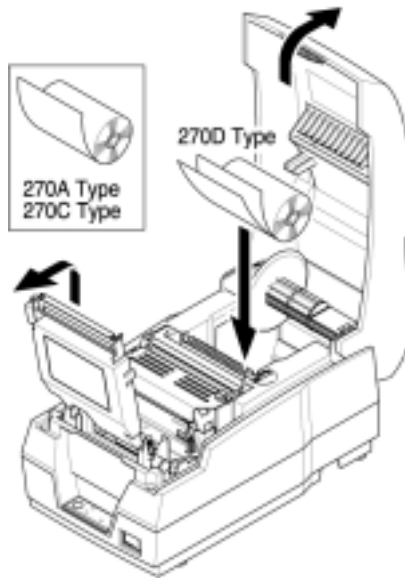
- 1). When possible, make sure that the printer has no un-printed data. This data may be lost.
- 2). Open the printer cover and remove the used paper roll core if there is one.
 - " SRP-270 A/C : 1Ply Paper
 - # SRP-270 D : 2Ply Paper



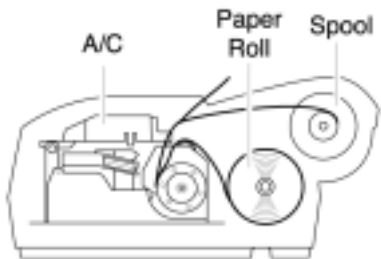
- 3). To use a new roll paper, unroll the paper and tear off the end of the paper correctly.



- 4). Put the roll paper on the paper holder and insert the paper in the printer.
- " SRP-270 A/C : 1Ply Paper
 - # SRP-270 D : 2Ply Paper



Incorrect

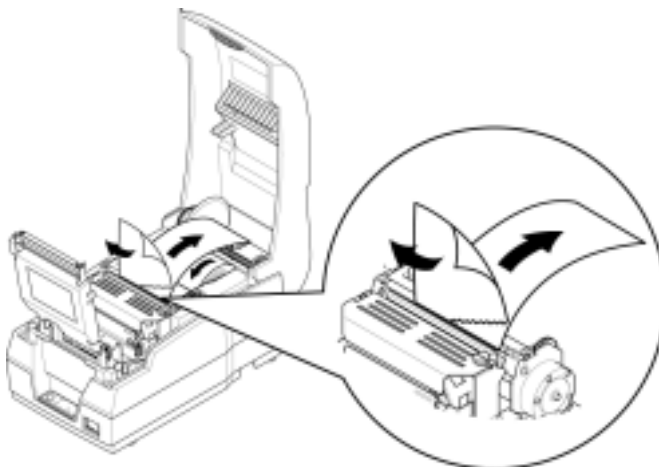


Correct

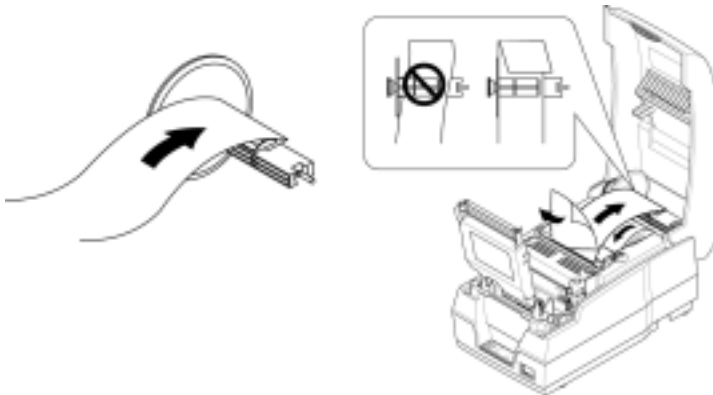
- 5) Insert the end of the roll paper straight into the paper inlet. The printer feeds the paper automatically and then the printer will cut the paper automatically(SRP-270C type series and SRP-270D type series). Refer to the attached label inside the cover.



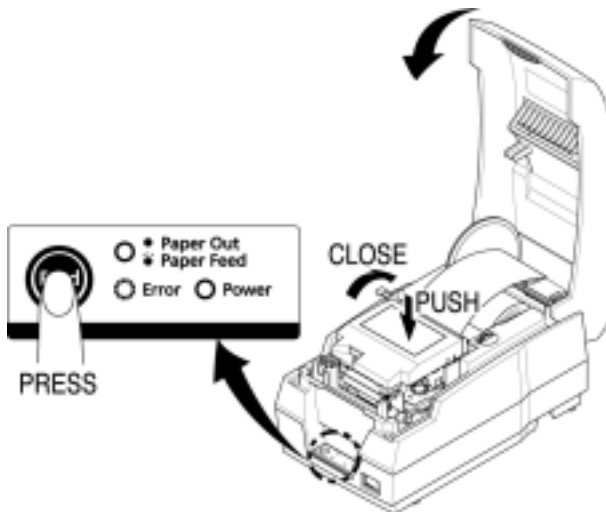
- 6). Tear off the paper as shown, if necessary.



- 7). Insert the end of the roll paper into the groove on the Roller-Pulley, warp the paper around it two or three times and load the Roller-Pulley onto the groove of the Case.



- 8). Push the auto-cutter cover as shown below and close the printer cover.



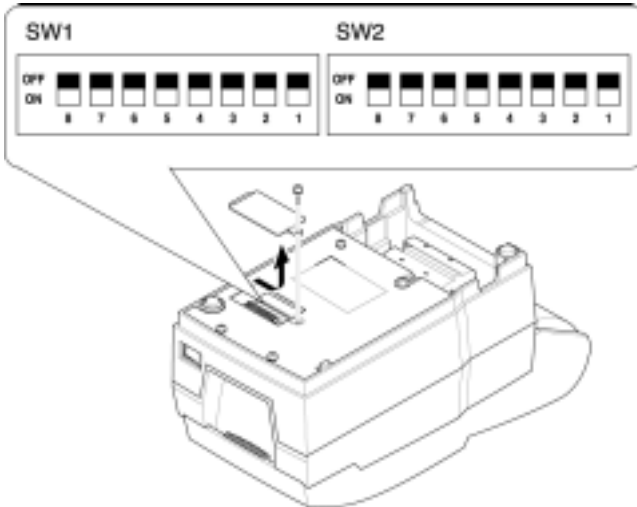
NOTE : Push upper face of the auto cutter cover for completely locking of it.

- 9). When the ERROR light is on and PAPER OUT light blinks, please press the FEED button. After that, the printer is ready for printing.

Chapter 4. Setting the DIP switches

The DIP switches are located on the bottom of the printer. The DIP switches are used to set the printer to perform various functions. Follow these steps when changing DIP switch settings :

1. Turn the printer power switch off.
2. Turn the printer over and remove the dip switch cover.
3. Move the DIP switches using tweezers or another narrow-ended tool.
Switches are on when up and off when down in the figure below.
4. The new setting takes effect when you turn on the printer.



NOTE : Always change DIP switch settings when the printer is turned off. Changes made with the power on have no effect until you turn the printer off and then on again.

Serial Interface (RS-232C/RS-485) Specification

DIP Switch 1 Setting

| SW | FUNCTION | ON | OFF | DEFAULT |
|----|-------------------------------|------------------------------|---------|---------|
| 1 | Emulation Selection | Refer to the following table | | OFF |
| 2 | | | | OFF |
| 3 | Auto-Cutter | Enable | Disable | OFF |
| 4 | FONT SPACE | 2 | 3 | OFF |
| 5 | Function for service Engineer | | | - |
| 6 | | | | - |
| 7 | | | | OFF |
| 8 | RESERVED | | | OFF |

Emulation mode selection

| SW – 1 | SW – 2 | MODE |
|--------|--------|---------|
| OFF | OFF | Epson |
| OFF | ON | Citizen |
| ON | OFF | Star |

Dip Switch 2 Setting

| SW | FUNCTION | ON | OFF | DEFAULT |
|----|---------------------|------------------------------|---------|---------|
| 1 | Data Receive Error | Print "?" | Ignore | OFF |
| 2 | Hexadecimal dump | YES | NO | OFF |
| 3 | Hand Shaking | XON/OFF | DTR/DSR | OFF |
| 4 | Word length | 7 bits | 8 bits | OFF |
| 5 | Parity check | Enable | Disable | OFF |
| 6 | Parity selection | EVEN | ODD | OFF |
| 7 | Baud Rate selection | Refer to the following table | | OFF |
| 8 | | | | OFF |

Baud rate selection

| Transmission speed | SW – 7 | SW – 8 |
|--------------------|--------|--------|
| 1200 baud | ON | ON |
| 2400 baud | OFF | ON |
| 4800 baud | ON | OFF |
| 9600 baud | OFF | OFF |

NOTE : When the word length is 7 bits, you can not parity check OFF status.

Parallel/USB Interface Specification

DIP Switch 1 Setting

| SW | FUNCTION | ON | OFF | DEFAULT |
|----|-------------------------------|------------------------------|---------|---------|
| 1 | Emulation Selection | Refer to the following table | | OFF |
| 2 | | | | OFF |
| 3 | Auto-Cutter | Enable | Disable | OFF |
| 4 | FONT SPACE | 2 | 3 | OFF |
| 5 | Function for service Engineer | | | - |
| 6 | | | | - |
| 7 | | | | OFF |
| 8 | RESERVED | | | OFF |

Emulation mode selection

| SW – 1 | SW – 2 | MODE |
|--------|--------|---------|
| OFF | OFF | Epson |
| OFF | ON | Citizen |
| ON | OFF | Star |

Dip Switch 2 Setting

| SW | FUNCTION | ON | OFF | DEFAULT |
|----|----------|-----|-----|---------|
| 1 | Reserved | - | - | OFF |
| 2 | Hex Dump | YES | NO | OFF |
| 3 | Reserved | - | - | OFF |
| 4 | Reserved | - | - | OFF |
| 5 | Reserved | - | - | OFF |
| 6 | Reserved | - | - | OFF |
| 7 | Reserved | - | - | OFF |
| 8 | Reserved | - | - | OFF |

Chapter 5. Hexadecimal Dumping

This feature allows experienced users to see exactly what data is coming to the printer. This can be useful in finding software problems. When you turn on the hexadecimal dump function, the printer prints all commands and data in hexadecimal format along with a guide section to help you find specific commands.

To use the hexadecimal dump function, follow these steps:

1. After you make sure that the printer is off.
2. Set DIP switch 2-2 On.
3. Turn on the printer, then the printer enters the hexadecimal dump mode.
4. Run any software program that sends data to the printer. The printer will print all the codes it receives in a two-column format. The first column contains the hexadecimal codes and the second column gives the ASCII characters that correspond to the codes.

| | |
|-------------------------|-----------------|
| 1B 21 00 1B 26 02 40 40 | . ! . . & . @ @ |
| 02 0D 1B 44 0A 14 1E 28 | . . . D . . . (|
| 00 01 0A 41 0D 42 0A 43 | . . . A . B . C |

- A period(.) is printed for each code that no ASCII equivalent.
 - During the hex dump, all commands except **DLE EOT** and **DLE ENQ** are disabled.
 - Insufficient print data to fill the last line can be printed by pressing the feed button.
5. When the printing finishes, turn off the printer, and then change DIP switch 2-2 OFF.
 6. Turn on the printer and then the hexadecimal mode is off.

Chapter 6. The self test

The self-test checks whether the printer has any problems. If the printer does not function properly, contact your dealer.

1. Make sure paper roll has been installed properly.
2. Turn on the power while holding down the FEED button. The self-test begins.
3. The self-test prints the current printer status, which provides the control ROM version and the DIP switch setting.
4. After printing the current printer status, self-test printing will print the following, and pause (The PAPER LED light blinks).

Self-test printing.
Please press the FEED button

5. Press the FEED button to continue printing. The printer prints a pattern using the built-in character set.
6. The self-test automatically ends after printing the following.

**** Character Test Completed ****

The printer is ready to receive data when it completes the self-test.

Chapter 7. Code Table

The following pages show the character code tables. To find the character corresponding to a hexadecimal number, count across the top of the table for the left digit and count down the left column of the table for the right digit. For example, 4A = J.

| HEX | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| HEX | 0000 | 0001 | 0010 | 0011 | 0100 | 0101 | 0110 | 0111 | 1000 | 1001 | 1010 | 1011 | 1100 | 1101 | 1110 | 1111 |
| 0 | 0000 | MUL | DLE | SP | 0 | @ | P | | C | E | á | £ | L | ı | α | ≡ |
| | 00 | 16 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 240 |
| 1 | 0001 | XON | ! | 1 | A | Q | a | q | ü | æ | ı | £ | ı | T | β | ± |
| | 01 | 17 | 33 | 49 | 65 | 81 | 97 | 113 | 129 | 145 | 161 | 177 | 193 | 209 | 225 | 241 |
| 2 | 0010 | | " | 2 | B | R | b | r | é | Æ | ó | £ | T | ı | Γ | ≥ |
| | 02 | 18 | 34 | 50 | 66 | 82 | 98 | 114 | 130 | 146 | 162 | 178 | 194 | 210 | 226 | 242 |
| 3 | 0011 | XOFF | # | 3 | C | S | c | s | â | ô | ú | | ı | L | π | ≤ |
| | 03 | 19 | 35 | 51 | 67 | 83 | 99 | 115 | 131 | 147 | 163 | 179 | 195 | 211 | 227 | 243 |
| 4 | 0100 | DOT | \$ | 4 | D | T | d | t | ä | ö | ñ | ı | ı | L | Σ | ı |
| | 04 | 20 | 36 | 52 | 68 | 84 | 100 | 116 | 132 | 148 | 164 | 180 | 196 | 212 | 228 | 244 |
| 5 | 0101 | ENQ | % | 5 | E | U | e | u | à | ø | ı | ı | ı | ı | σ | J |
| | 05 | 21 | 37 | 53 | 69 | 85 | 101 | 117 | 133 | 149 | 165 | 181 | 197 | 213 | 229 | 245 |
| 6 | 0110 | | & | 6 | F | V | f | v | á | ù | â | ı | ı | ı | μ | ı |
| | 06 | 22 | 38 | 54 | 70 | 86 | 102 | 118 | 134 | 150 | 166 | 182 | 198 | 214 | 230 | 246 |
| 7 | 0111 | | ' | 7 | G | W | g | w | ç | ı | ı | ı | ı | ı | ı | ı |
| | 07 | 23 | 39 | 55 | 71 | 87 | 103 | 119 | 135 | 151 | 167 | 183 | 199 | 215 | 231 | 247 |
| 8 | 1000 | BS | CAN | (| 8 | H | X | h | x | ê | ı | ı | ı | ı | ı | ı |
| | 08 | 24 | 40 | 56 | 72 | 88 | 104 | 120 | 136 | 152 | 168 | 184 | 200 | 216 | 232 | 248 |
| 9 | 1001 | HT |) | 9 | I | Y | i | y | ë | ö | ı | ı | ı | ı | ı | ı |
| | 09 | 25 | 41 | 57 | 73 | 89 | 105 | 121 | 137 | 153 | 169 | 185 | 201 | 217 | 233 | 249 |
| A | 1010 | LF | * | : | J | Z | j | z | è | ı | ı | ı | ı | ı | ı | ı |
| | 10 | 26 | 42 | 58 | 74 | 90 | 106 | 122 | 138 | 154 | 170 | 186 | 202 | 218 | 234 | 250 |
| B | 1011 | ESC | + | ; | K | | k | (| ı | ı | ı | ı | ı | ı | ı | ı |
| | 11 | 27 | 43 | 59 | 75 | 91 | 107 | 123 | 139 | 155 | 171 | 187 | 203 | 219 | 235 | 251 |
| C | 1100 | FF | FS | < | L | | ı | ı | ı | ı | ı | ı | ı | ı | ı | ı |
| | 12 | 28 | 44 | 60 | 76 | 92 | 108 | 124 | 140 | 156 | 172 | 188 | 204 | 220 | 236 | 252 |
| D | 1101 | CR | GS | = | M | | m |) | ı | ı | ı | ı | ı | ı | ı | ı |
| | 13 | 29 | 45 | 61 | 77 | 93 | 109 | 125 | 141 | 157 | 173 | 189 | 205 | 221 | 237 | 253 |
| E | 1110 | | > | N | | n | ~ | ı | ı | ı | ı | ı | ı | ı | ı | ı |
| | 14 | 30 | 46 | 62 | 78 | 94 | 110 | 126 | 142 | 158 | 174 | 190 | 206 | 222 | 238 | 254 |
| F | 1111 | | / | ? | O | | o | SP | A | ı | ı | ı | ı | ı | ı | ı |
| | 15 | 31 | 47 | 63 | 79 | 95 | 111 | 127 | 143 | 159 | 175 | 191 | 207 | 223 | 239 | 255 |

| | HEX | 8 | 9 | A | B | C | D | E | F |
|-----|------|------|------|------|------|------|------|------|------|
| HEX | BIN | 1000 | 1001 | 1010 | 1011 | 1100 | 1101 | 1110 | 1111 |
| 0 | 0000 | Ç | É | Á | ⌘ | Ł | Š | Ó | — |
| | | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 240 |
| 1 | 0001 | Ü | Æ | Í | ⌘ | Ł | Đ | ß | ± |
| | | 129 | 145 | 161 | 177 | 193 | 209 | 225 | 241 |
| 2 | 0010 | É | Æ | Ó | ⌘ | Ł | É | Ô | — |
| | | 130 | 146 | 162 | 178 | 194 | 210 | 226 | 242 |
| 3 | 0011 | À | Ô | Ú | ı | Ł | È | Ò | ‡ |
| | | 131 | 147 | 163 | 179 | 195 | 211 | 227 | 243 |
| 4 | 0100 | Ä | Ö | Ñ | ı | — | È | Ö | |
| | | 132 | 148 | 164 | 180 | 196 | 212 | 228 | 244 |
| 5 | 0101 | À | Ò | Ñ | À | ı | ı | Ö | § |
| | | 133 | 149 | 165 | 181 | 197 | 213 | 229 | 245 |
| 6 | 0110 | Ä | Ü | À | À | ä | ı | ı | ÷ |
| | | 134 | 150 | 166 | 182 | 198 | 214 | 230 | 246 |
| 7 | 0111 | Ç | Ü | Q | À | À | ı | ı | ı |
| | | 135 | 151 | 167 | 183 | 199 | 215 | 231 | 247 |
| 8 | 1000 | È | ÿ | ı | ı | ı | ı | ı | ı |
| | | 136 | 152 | 168 | 184 | 200 | 216 | 232 | 248 |
| 9 | 1001 | È | Ö | ı | ı | ı | ı | ı | ı |
| | | 137 | 153 | 169 | 185 | 201 | 217 | 233 | 249 |
| A | 1010 | È | Ü | ı | ı | ı | ı | ı | ı |
| | | 138 | 154 | 170 | 186 | 202 | 218 | 234 | 250 |
| B | 1011 | İ | ø | ı | ı | ı | ı | ı | ı |
| | | 139 | 155 | 171 | 187 | 203 | 219 | 235 | 251 |
| C | 1100 | İ | £ | ı | ı | ı | ı | ı | ı |
| | | 140 | 156 | 172 | 188 | 204 | 220 | 236 | 252 |
| D | 1101 | İ | Ø | ı | ı | ı | ı | ı | ı |
| | | 141 | 157 | 173 | 189 | 205 | 221 | 237 | 253 |
| E | 1110 | À | × | « | ı | ı | ı | ı | ı |
| | | 142 | 158 | 174 | 190 | 206 | 222 | 238 | 254 |
| F | 1111 | À | f | » | ı | ı | ı | ı | ı |
| | | 143 | 159 | 175 | 191 | 207 | 223 | 239 | 255 |

| | HEX | 8 | 9 | A | B | C | D | E | F |
|-----|------|-------|-------|-------|------|------|------|-------|--------|
| HEX | BIN | 1000 | 1001 | 1010 | 1011 | 1100 | 1101 | 1110 | 1111 |
| 0 | 0000 | Ç 128 | É 144 | Á 160 | 176 | 192 | 208 | α 224 | 240 |
| 1 | 0001 | ü 129 | À 145 | Í 161 | 177 | 193 | 209 | β 225 | ± 241 |
| 2 | 0010 | é 130 | È 146 | ó 162 | 178 | 194 | 210 | Γ 226 | ≥ 242 |
| 3 | 0011 | ā 131 | ō 147 | ú 163 | 179 | 195 | 211 | π 227 | ≤ 243 |
| 4 | 0100 | ǎ 132 | ö 148 | ñ 164 | 180 | 196 | 212 | Σ 228 | ƒ 244 |
| 5 | 0101 | à 133 | ò 149 | Ñ 165 | 181 | 197 | 213 | σ 229 | Ƶ 245 |
| 6 | 0110 | Á 134 | Ó 150 | ä 166 | 182 | 198 | 214 | μ 230 | ÷ 246 |
| 7 | 0111 | ç 135 | ù 151 | ó 167 | 183 | 199 | 215 | τ 231 | ≈ 247 |
| 8 | 1000 | ê 136 | î 152 | ¿ 168 | 184 | 200 | 216 | Φ 232 | ° 248 |
| 9 | 1001 | Ê 137 | Ï 153 | Ò 169 | 185 | 201 | 217 | Θ 233 | • 249 |
| A | 1010 | è 138 | Ù 154 | 170 | 186 | 202 | 218 | Ω 234 | • 250 |
| B | 1011 | í 139 | ƒ 155 | 171 | 187 | 203 | 219 | δ 235 | 251 |
| C | 1100 | Ó 140 | £ 156 | 172 | 188 | 204 | 220 | ∞ 236 | n 252 |
| D | 1101 | ì 141 | Û 157 | 173 | 189 | 205 | 221 | ø 237 | ² 253 |
| E | 1110 | Ǻ 142 | Ƨ 158 | « 174 | 190 | 206 | 222 | 238 | 254 |
| F | 1111 | ǻ 143 | Ó 159 | » 175 | 191 | 207 | 223 | 239 | SP 255 |

| | HEX | 8 | 9 | A | B | C | D | E | F |
|-----|------|------|------|------|------|------|------|------|------|
| HEX | BIN | 1000 | 1001 | 1010 | 1011 | 1100 | 1101 | 1110 | 1111 |
| 0 | 0000 | Ç | È | Ì | Ñ | Œ | Ɔ | α | |
| | | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 240 |
| 1 | 0001 | Ü | É | Í | Ò | Ƨ | Ƨ | β | ± |
| | | 129 | 145 | 161 | 177 | 193 | 209 | 225 | 241 |
| 2 | 0010 | É | Ê | Ó | Ô | Ƨ | Ƨ | Ƨ | ≥ |
| | | 130 | 146 | 162 | 178 | 194 | 210 | 226 | 242 |
| 3 | 0011 | Ā | Ō | Ú | Ƨ | Ƨ | Ƨ | π | ≤ |
| | | 131 | 147 | 163 | 179 | 195 | 211 | 227 | 243 |
| 4 | 0100 | Ā | Ē | Ƨ | Ƨ | Ƨ | Ƨ | Σ | Ƨ |
| | | 132 | 148 | 164 | 180 | 196 | 212 | 228 | 244 |
| 5 | 0101 | à | Ï | Ƨ | Ƨ | Ƨ | Ƨ | σ | Ƨ |
| | | 133 | 149 | 165 | 181 | 197 | 213 | 229 | 245 |
| 6 | 0110 | Ƨ | Ū | Ƨ | Ƨ | Ƨ | Ƨ | μ | ÷ |
| | | 134 | 150 | 166 | 182 | 198 | 214 | 230 | 246 |
| 7 | 0111 | Ƨ | Ū | Ƨ | Ƨ | Ƨ | Ƨ | τ | ≈ |
| | | 135 | 151 | 167 | 183 | 199 | 215 | 231 | 247 |
| 8 | 1000 | ê | Ƨ | Ƨ | Ƨ | Ƨ | Ƨ | φ | ° |
| | | 136 | 152 | 168 | 184 | 200 | 216 | 232 | 248 |
| 9 | 1001 | ë | Ō | Ƨ | Ƨ | Ƨ | Ƨ | θ | ° |
| | | 137 | 153 | 169 | 185 | 201 | 217 | 233 | 249 |
| A | 1010 | è | Ū | Ƨ | Ƨ | Ƨ | Ƨ | Ω | ° |
| | | 138 | 154 | 170 | 186 | 202 | 218 | 234 | 250 |
| B | 1011 | ÿ | Ƨ | Ƨ | Ƨ | Ƨ | Ƨ | δ | |
| | | 139 | 155 | 171 | 187 | 203 | 219 | 235 | 251 |
| C | 1100 | î | £ | Ƨ | Ƨ | Ƨ | Ƨ | ∞ | Ƨ |
| | | 140 | 156 | 172 | 188 | 204 | 220 | 236 | 252 |
| D | 1101 | Ƨ | Ū | Ƨ | Ƨ | Ƨ | Ƨ | ø | ² |
| | | 141 | 157 | 173 | 189 | 205 | 221 | 237 | 253 |
| E | 1110 | Ā | Ū | « | Ƨ | Ƨ | Ƨ | Ƨ | Ƨ |
| | | 142 | 158 | 174 | 190 | 206 | 222 | 238 | 254 |
| F | 1111 | š | Ƨ | » | Ƨ | Ƨ | Ƨ | SP | |
| | | 143 | 159 | 175 | 191 | 207 | 223 | 239 | 255 |

| | HEX | 8 | 9 | A | B | C | D | E | F |
|-----|------|------|------|------|------|------|------|------|------|
| HEX | BIN | 1000 | 1001 | 1010 | 1011 | 1100 | 1101 | 1110 | 1111 |
| 0 | 0000 | Ç | É | á | ⌘ | Ł | ⌚ | α | |
| | | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 240 |
| 1 | 0001 | ü | æ | í | ⌘ | ⌚ | τ | β | ± |
| | | 129 | 145 | 161 | 177 | 193 | 209 | 225 | 241 |
| 2 | 0010 | é | Æ | ó | ⌘ | τ | τ | Γ | ≥ |
| | | 130 | 146 | 162 | 178 | 194 | 210 | 226 | 242 |
| 3 | 0011 | ä | ö | ú | | † | ⌚ | π | ≤ |
| | | 131 | 147 | 163 | 179 | 195 | 211 | 227 | 243 |
| 4 | 0100 | ä | ö | ñ | † | - | ⌚ | Σ | † |
| | | 132 | 148 | 164 | 180 | 196 | 212 | 228 | 244 |
| 5 | 0101 | à | ò | Ñ | † | + | Γ | σ | ↓ |
| | | 133 | 149 | 165 | 181 | 197 | 213 | 229 | 245 |
| 6 | 0110 | â | û | â | † | † | Γ | μ | ÷ |
| | | 134 | 150 | 166 | 182 | 198 | 214 | 230 | 246 |
| 7 | 0111 | ç | ù | ó | Γ | † | + | τ | ≈ |
| | | 135 | 151 | 167 | 183 | 199 | 215 | 231 | 247 |
| 8 | 1000 | ē | ÿ | ı | Γ | ⌚ | + | Φ | ° |
| | | 136 | 152 | 168 | 184 | 200 | 216 | 232 | 248 |
| 9 | 1001 | ë | ö | ı | † | Γ | ↓ | θ | • |
| | | 137 | 153 | 169 | 185 | 201 | 217 | 233 | 249 |
| A | 1010 | è | ü | ı | | ⌚ | Γ | Ω | • |
| | | 138 | 154 | 170 | 186 | 202 | 218 | 234 | 250 |
| B | 1011 | ï | ø | ‡ | Γ | τ | ■ | δ | |
| | | 139 | 155 | 171 | 187 | 203 | 219 | 235 | 251 |
| C | 1100 | î | £ | ‡ | ↓ | † | ■ | ∞ | n |
| | | 140 | 156 | 172 | 188 | 204 | 220 | 236 | 252 |
| D | 1101 | ì | ø | ı | ↓ | - | ■ | ø | ª |
| | | 141 | 157 | 173 | 189 | 205 | 221 | 237 | 253 |
| E | 1110 | Ä | π | « | ↓ | + | ↓ | | ■ |
| | | 142 | 158 | 174 | 190 | 206 | 222 | 238 | 254 |
| F | 1111 | Å | f | π | Γ | ⌚ | ■ | | SP |
| | | 143 | 159 | 175 | 191 | 207 | 223 | 239 | 255 |

| | HEX | 8 | 9 | A | B | C | D | E | F |
|-----|------|-------|-------|-------|-------|-------|-------|-------|--------|
| HEX | BIN | 1000 | 1001 | 1010 | 1011 | 1100 | 1101 | 1110 | 1111 |
| 0 | 0000 | Ç 128 | É 144 | á 160 | ■ 176 | ┐ 192 | ð 208 | ó 224 | — 240 |
| 1 | 0001 | ü 129 | æ 145 | í 161 | ■ 177 | ┌ 193 | Ð 209 | β 225 | ± 241 |
| 2 | 0010 | é 130 | Æ 146 | ó 162 | ■ 178 | └ 194 | Ê 210 | ô 226 | = 242 |
| 3 | 0011 | â 131 | ô 147 | ú 163 | ┆ 179 | ┐ 195 | Ë 211 | ò 227 | ¼ 243 |
| 4 | 0100 | ä 132 | ö 148 | ñ 164 | ┆ 180 | — 196 | Ë 212 | õ 228 | ¶ 244 |
| 5 | 0101 | à 133 | ò 149 | Ñ 165 | Á 181 | ÷ 197 | € 213 | Ö 229 | § 245 |
| 6 | 0110 | â 134 | û 150 | ä 166 | Ã 182 | ã 198 | Í 214 | μ 230 | ÷ 246 |
| 7 | 0111 | ç 135 | ù 151 | ó 167 | À 183 | Ä 199 | Î 215 | þ 231 | · 247 |
| 8 | 1000 | ê 136 | ÿ 152 | ¿ 168 | © 184 | ℓ 200 | Ï 216 | ƒ 232 | ° 248 |
| 9 | 1001 | ë 137 | ÿ 153 | ® 169 | ¶ 185 | ℓ 201 | ┐ 217 | ú 233 | · 249 |
| A | 1010 | è 138 | ÿ 154 | ¬ 170 | ¶ 186 | ℓ 202 | ┐ 218 | û 234 | · 250 |
| B | 1011 | ï 139 | ø 155 | ½ 171 | ¶ 187 | ¶ 203 | ■ 219 | ü 235 | ¹ 251 |
| C | 1100 | î 140 | £ 156 | ¼ 172 | ¶ 188 | ¶ 204 | ■ 220 | ý 236 | ³ 252 |
| D | 1101 | ì 141 | ø 157 | ì 173 | ¢ 189 | = 205 | ì 221 | ÿ 237 | ² 253 |
| E | 1110 | Ä 142 | × 158 | ≤ 174 | ¥ 190 | ¶ 206 | Ï 222 | — 238 | ■ 254 |
| F | 1111 | Å 143 | ƒ 159 | ≥ 175 | ┐ 191 | ¶ 207 | ■ 223 | · 239 | SP 255 |

| Country | ASCII code (hexadecimal) | | | | | | | | | | | | |
|------------|--------------------------|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| | Hex | 23 | 24 | 40 | 5B | 5C | 5D | 5E | 60 | 7B | 7C | 7D | 7E |
| | Dec | 35 | 36 | 64 | 91 | 92 | 93 | 94 | 96 | 123 | 124 | 125 | 126 |
| U.S.A. | # | \$ | @ | [| \ |] | ^ | ` | { | | } | ~ | |
| France | # | \$ | à | ° | ç | § | ^ | ` | é | ù | è | " | |
| Germany | # | \$ | § | Ä | Ö | Ü | ^ | ` | ä | ö | ü | ß | |
| U.K. | £ | \$ | @ | [| \ |] | ^ | ` | { | | } | ~ | |
| Denmark I | # | \$ | @ | Æ | Ø | Å | ^ | ` | œ | ø | å | ~ | |
| Sweden | # | α | É | Ä | Ö | Å | Ü | é | ä | ö | å | ü | |
| Italy | # | \$ | @ | ° | \ | é | ^ | ù | à | ò | è | ì | |
| Spain | † | \$ | @ | ¡ | Ñ | ¿ | ^ | ` | " | ñ | | ~ | |
| Norway | # | α | É | Æ | Ø | Å | Ü | é | œ | ø | å | ü | |
| Denmark II | # | \$ | É | Æ | Ø | Å | Ü | é | œ | ø | å | ü | |

International Character

Chapter 8. Control Commands List

EPSON mode

| Control code | Hexadecimal code | Function |
|--------------------|------------------|--|
| <HT> | 09 | Horizontal tab |
| <LF> | 0A | Print and line feed |
| <CR> | 0D | Print and carriage return |
| <DLE> <EOT> n | 10 04 n | Real-time status transmission |
| <DLE> <ENQ> n | 10 05 n | Real-time request to printer |
| <ESC> <SP> n | 1B 20 n | Set right-side character spacing |
| <ESC> ! n | 1B 21 n | Select print modes |
| <ESC> % n | 1B 25 n | Select/Cancel user-defined character set |
| <ESC> & y c1 c2 .. | 1B 26 y c1 c2 | Define user-defined characters |
| <ESC> * m nL nH .. | 1B 2A m nL nH | Select bit-image mode |
| <ESC> - n | 1B 2D n | Turn underline mode on/off |
| <ESC> 2 | 1B 32 | Select default line spacing |
| <ESC> 3 n | 1B 33 n | Set line spacing |
| <ESC> < | 1B 3C | Return home |
| <ESC> = n | 1B 3D n | Set peripheral device |
| <ESC> ? n | 1B 3F n | Cancel user-defined characters |
| <ESC> @ | 1B 40 | Initialize printer |
| <ESC> D n1 ~ nK | 1B 44 ... 00 | Set horizontal tab position |
| <ESC> E n | 1B 45 n | Turn emphasized mode on/off |
| <ESC> G n | 1B 47 n | Turn double-strike mode on/off |
| <ESC> J n | 1B 4A n | Print and feed paper |
| <ESC> K n | 1B 4B n | Print and Reverse feed |
| <ESC> R n | 1B 52 n | Select an international character set |
| <ESC> U n | 1B 55 n | Turn unidirectional printing mode |
| <ESC> a n | 1B 61 n | Select justification |

| Control code | Hexadecimal code | Function |
|------------------------|----------------------|---|
| <ESC> c 3 n | 1B 63 33 n | Select paper sensor to output paper end signals |
| <ESC> c 4 n | 1B 63 34 n | Select paper sensor to stop printing |
| <ESC> c 5 n | 1B 63 35 n | Enable/Disable panel button |
| <ESC> d n | 1B 64 n | Print and feed n lines |
| <ESC> p m t1 t2 | 1B 70 m t1 t2 | Generate pulse |
| <ESC> t n | 1B 74 n | Select character code table |
| <ESC> r n | 1B 72 n | Select print color |
| <ESC> m | 1B 6D | Execute partial cut |
| <ESC> { n | 1B 7B n | Turn on/off upside-down printing mode |
| <ESC> e n | 1B 65 n | Print and reverse feed n lines |
| <GS> l n | 1D 49 n | Transmit printer ID |
| <GS> V m <GS> V m n | 1D 56 m 1D 56 m n | Select cut mode and cut paper |
| <GS> a n | 1D 61 n | Enable/Disable Automatic status back |
| <GS> r n | 1D 72 n | Transmit status |

CITIZEN mode

| Control code | Hexadecimal code | Function |
|---------------|------------------|-------------------------------|
| <FF> "n" | 0C + n | "n" -lines paper feed command |
| <LF> | 0A | Paper feed command |
| <SO> | 0E | Enlarged character command |
| <SI> | 0F | Normal character command |
| <DC1> | 11 | Initial set command |
| <DC2> | 12 | Inverted character command |
| <DC3> | 13 | Red color print command |
| <CAN> | 18 | Clear command |
| <ESC> "P" <0> | 1B, 50, 00 | Paper partial cut command |
| <ESC> "P" <1> | 1B, 50, 01 | Paper partial cut command |
| <ESC> "-" "n" | 1B, 2D, n | Underline command |

| Control code | Hexadecimal code | Function |
|---------------------|------------------|--|
| <ESC> "1" | 1B, 31 | 1/9 inch paper feed preset command |
| <ESC> "2" | 1B, 32 | 2/9 inch paper feed preset command |
| <ESC> "C" "n" | 1B, 43, n | Page length set command |
| <ESC> "f" "1" | 1B, 66, 01 | Form feed command |
| <SUB> | 1A | Second drawer drive command |
| <FS> | 1C | First drawer quick drive command |
| <ESC><BEL> n1 n2 | 1B, 07, n1, n2 | Drive pulse setting command for the first drawer |
| <BEL> | 07 | First drawer drive command |

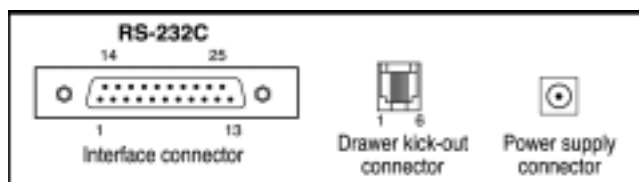
STAR mode

| Control code | Hexadecimal code | Function |
|---------------|------------------|--|
| <ESC> "C" n | 1B 43 n | Set page length at n lines |
| <ESC> "R" n | 1B 52 n | Select international character set. |
| <ESC> "M" | 1B 4D | Select 9×7(Half dots) character size |
| <SO> | 0E | Select expanded character mode |
| <SI> | 0F | Select upside-down |
| <DC2> | 12 | Cancel upside-down character |
| <DC4> | 14 | Cancel expanded character mode(Default setting) |
| <ESC> "W" "1" | 1B 57 31 | Select expanded character mode |
| <ESC> "W" <1> | 1B 57 01 | |
| <ESC> "W" "0" | 1B 57 30 | Cancel expanded character mode (Default setting) |
| <ESC> "W" <0> | 1B 57 00 | |
| <ESC> "4" | 1B 34 | Red color print selection |
| <ESC> "5" | 1B 35 | Red color print deselection |
| <ESC> "E" | 1B 45 | Emphasized print mode selection |
| <ESC> "F" | 1B 46 | Emphasized print mode deselection(Default setting) |
| <ESC> "a" n | 1B 61 n | Feed paper n lines |

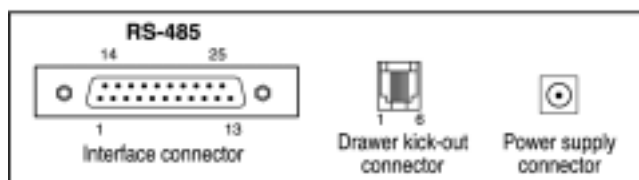
| Control code | Hexadecimal code | Function |
|--------------------|------------------|---|
| <ESC><BEL>n1 n2 | 1B 07 n1 n2 | Adjust drive pulse width for peripheral unit(Default setting) |
| <BEL> | 07 | Deferred drive command "A" for peripheral unit 1 |
| <FS> | 1C | Immediate drive command "B" for peripheral unit 1 |
| <SUB> | 1A | Immediate drive command for peripheral unit 2 |
| | 19 | Immediate drive command for peripheral unit 2 |
| <CAN> | 18 | Cancel print data in buffer |
| <ESC> "@" | 1B 40 | Initialize printer |
| <ESC> "e" "0" | 1B 65 30 | FEED switch valid (Default setting) |
| <ESC> "e" <0> | 1B 65 00 | |
| <ESC> "e" "1" | 1B 65 31 | FEED switch invalid |
| <ESC> "e" <1> | 1B 65 01 | |
| <ESC> U n | 1B 55 n | Set or Cancel uni-direction mode |
| <ESC> - n | 1B 2D n | Set or Cancel underline mode |
| <ESC> "z" "1" | 1B 7A 31 | Set 1/6 inch line feed |
| <ESC> "z" <1> | 1B 7A 01 | |
| <FF> | 0C | Page feed (form feed) |
| <ESC> d <0> | 1B 64 00 | Partial cut |
| <ESC> d <1> | 1B 64 01 | Partial cut |
| <ESC> "-" "1" | 1B 5F 31 | Select overline mode |
| <ESC> "-" <1> | 1B 5F 01 | |
| <ESC> "-" "0" | 1B 5F 30 | Cancel overline mode |
| <ESC> "-" <0> | 1B 5F 00 | |
| <ESC> "e" "1" | 1B 65 31 | Set the control panel switch invalid |
| <ESC> "e" <1> | 1B 65 01 | |
| <ESC> "e" "0" | 1B 65 30 | Set the control panel switch valid |
| <ESC> "e" <0> | 1B 65 00 | |
| <ESC> "f" "1" | 1B 66 31 | Set the ON LINE switch invalid |
| <ESC> "f" <1> | 1B 66 01 | |
| <ESC> "f" "0" | 1B 66 30 | Set the ON LINE switch valid |
| <ESC> "f" <0> | 1B 66 00 | |

Appendix A

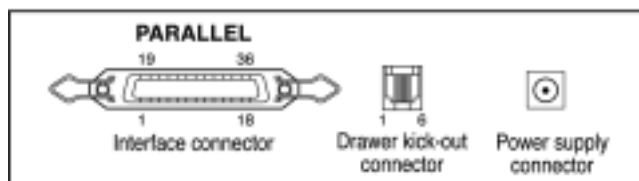
Connectors



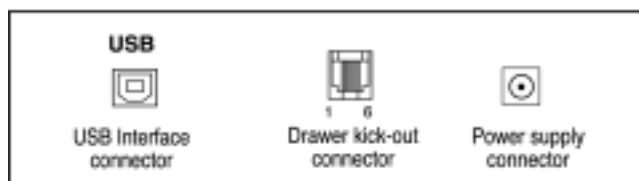
SRP-270 Connector
(Serial Interface: RS-232C)



SRP-270 Connector
(Serial Interface: RS-485)



SRP-270 Connector
(Parallel Interface)



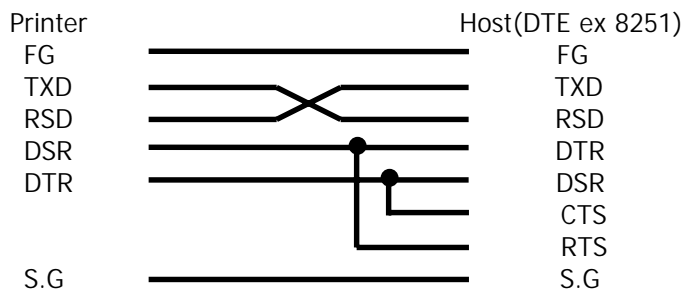
SRP-270U Connector
(USB Interface)

Interface Connector

Serial Interface (RS-232C)

| Pin No. | Signal name | Direction | Function |
|---------|-------------|-----------|---------------------|
| 1 | FG | - | Frame Ground |
| 2 | TXD | Output | Transmit Data |
| 3 | RXD | Input | Receive Data |
| 6 | DSR | Input | Data Set Ready |
| 7 | SG | - | Signal Ground |
| 20 | DTR | Output | Data Terminal Ready |

Serial Communication Interface (Example)



Serial Interface (RS-485)

| Pin No. | Signal Name | Direction | Function |
|---------|-------------|-----------|---------------------|
| 1 | FGND | - | Frame Ground |
| 2 | SD2 | Output | Send Data |
| 3 | SD1 | Output | |
| 4 | RD2 | Input | Receive Data |
| 5 | RD1 | Input | |
| 7 | SGND | - | Signal Ground |
| 8 | DR2 | Output | Same as DTR(RS-232) |
| 9 | DR1 | | |
| 10 | CS2 | Input | Same as DSR(RS-232) |
| 11 | CS1 | | |

Parallel Interface (IEEE-1284)

| Pin No. | Source | Compatibility Mode | Nibble Mode | Byte Mode |
|---------|----------------|--------------------|---------------------|--------------|
| 1 | Host | nStrobe | HostClk | HostClk |
| 2 | Host / Printer | Data 0 (LSB) | - | Data 0 (LSB) |
| 3 | Host / Printer | Data 1 | - | Data 1 |
| 4 | Host / Printer | Data 2 | - | Data 2 |
| 5 | Host / Printer | Data 3 | - | Data 3 |
| 6 | Host / Printer | Data 4 | - | Data 4 |
| 7 | Host / Printer | Data 5 | - | Data 5 |
| 8 | Host / Printer | Data 6 | - | Data 6 |
| 9 | Host / Printer | Data 7 (MSB) | - | Data 7 (MSB) |
| 10 | Printer | nAck | PtrClk | PtrClk |
| 11 | Printer | Busy | PtrBusy /Data3,7 | PtrBusy |
| 12 | Printer | Perror | AckDataReq /Data2,6 | AckDataReq |
| 13 | Printer | Select | Xflag /Data1,5 | Xflag |
| 14 | Host | nAutoFd | HostBusy | HostBusy |
| 15 | - | NC | NC | NC |
| 16 | - | GND | GND | GND |
| 17 | - | FG | FG | FG |
| 18 | Printer | Logic-H | Logic-H | Logic-H |
| 19~30 | - | GND | GND | GND |
| 31 | Host | nInit | nInit | nInit |
| 32 | Printer | nFault | nDataAvail /Data0,4 | nDataAvail |
| 33 | - | GND | ND | ND |
| 34 | Printer | DK_Status | ND | ND |
| 35 | Printer | +5V | ND | ND |
| 36 | Host | nSelectIn | 1284-Active | 1284-Active |

USB Interface

| Pin No. | Signal Name | Assignment (Color) | Function |
|---------|-------------|-----------------------|---------------|
| Shell | Shield | Drain Wire | Frame Ground |
| 1 | VBUS | Red | Host Power |
| 2 | D- | White | Data Line(D-) |
| 3 | D+ | Green | Data Line(D+) |
| 4 | GND | Black | Signal Ground |

Drawer Connector

| Pin No. | Signal name | Direction |
|---------|--------------------------------|-----------|
| 1 | Frame ground | - |
| 2 | Drawer kick-out drive signal 1 | Output |
| 3 | Drawer open/close signal | Input |
| 4 | +24V | - |
| 5 | Drawer kick-out drive signal 2 | Output |
| 6 | Signal ground | - |

* SRP-270 Series Model Listing

Model Name : SRP-27xyz

| x | | Y | | z | |
|---|-----------|---|-----------------------------------|-------|------------------|
| 0 | Ivory | A | Basic | Blank | RS-232C |
| 5 | Dark Gray | C | Basic + Auto cutter | S | RS-485 |
| | | D | Basic + Auto cutter + Spool | U | IEEE-1284 USB |

Appendix B

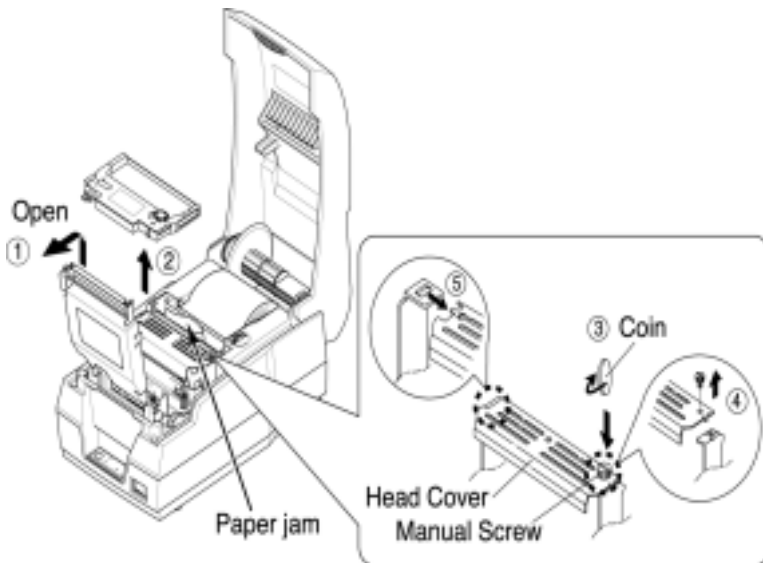
Specification

| | | |
|-------------|-----------------------|--|
| Printer | Printing method | Serial impact dot matrix |
| | Number of head pin | 9 wires |
| | Printing direction | Bi-directional |
| | Lines per second | Approx. 4.6 LPS |
| | Characters per line | 40 (9*7), 33(9*9) |
| Ribbon | Ribbon type | Cartridge type (ERC-38 Black/Red) |
| | Color | Black & Red |
| | Ribbon life | Approx. Black: 1.5 Million characters Red: 0.75 Million characters |
| Paper | Paper type | Roll paper |
| | Paper width | W76mm \pm 0.5mm (2.99" \pm 0.22") |
| | Roll diameter | Max. ϕ 80mm (3.14") |
| | Thickness | 0.06mm \sim 0.085mm (0.002" \sim 0.003") |
| Adapter | Overall dimensions | 120mm * 63mm * 33mm (4.71" * 2.47" * 1.29") |
| | Weight | 215gr (0.5 lbs) |
| | Types | AD-270 Free Voltage (50Hz \sim 60Hz) |
| Auto Cutter | Cutter type | Gillotine type |
| | Cutting width | Max. 85 mm |
| | Cutting thickness | Max. 0.1mm |
| ETC | Data buffer | 4k bytes |
| | Overall dimension | SRP-270A/AS/AP/AU: 160(W)*249(D)*130(H)mm(6.3"*9.8"*5.12") SRP-270C/CS/CP/CU : 160(W)*249(D)*149(H)mm(6.3"*9.8"*5.87") SRP-270D/DS/DP/DU: 160(W)*294(D)*160(H)mm(6.3"*11.57"*6.3") |
| | Weight | Weight (printer only) / Weight (with box & accessories): SRP-270A TYPE: 2.2 Kg (4.9 lbs) / 3.2 Kg (7.1 lbs) SRP-270C TYPE: 2.5 Kg (5.5 lbs) / 3.5 Kg (7.7 lbs) SRP-270D TYPE: 2.6 Kg (5.7 lbs) / 3.6 Kg (7.9 lbs) |
| | Rating | DC 24 V, 1.0 A |
| | Power consumption | Standby: 8 W, Operation: 24 W |
| | EMI | FCC class A, CE |
| | Safety standards | UL/CSA, TUV |
| | Reliability | Printer MCBF: 7,500,000 lines (Except print head life) Print head life: 300,000,000 Dots |
| | Operation temperature | 0 \sim 40 (32 \sim 104) |
| | Operation humidity | 30% \sim 80% |
| | Storage temperature | -5 \sim 50 (23 \sim 122) |
| | Storage humidity | 10% \sim 95% |

Appendix C

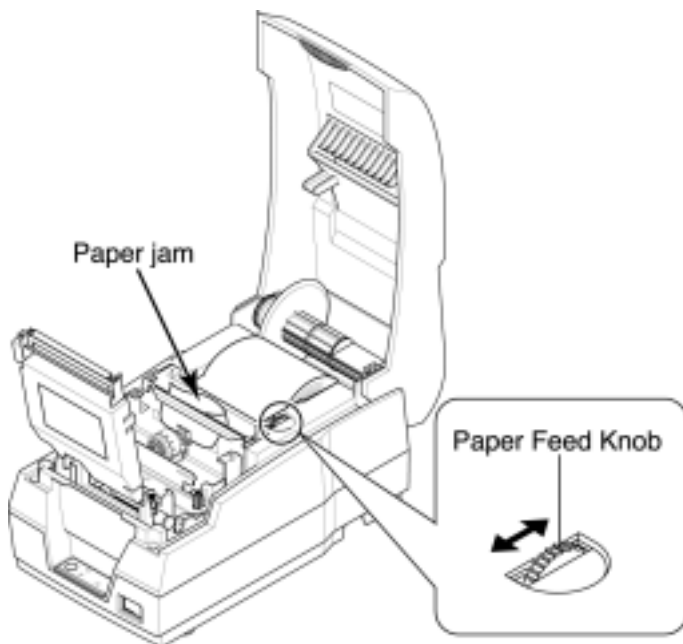
Removing Jammed Paper

- 1) Open the printer cover
- 2) Raise the auto cutter unit by lifting the knob lock.
- 3) Remove the ribbon cassette.
- 4) Loosen the manual screw.
- 5) Remove the head cover.



CAUTION: The printer head becomes very hot during printing.
Allow it to be cool before you reach into the printer.

- 6) Move the print head carriage to the reverse direction of paper jam. By pushing on the side of the print head as shown in the illustration.
- 7) Remove the jammed paper by rotating the paper-feed knob.



- 8) Replace the head cover and secure it with screw.
- 9) Replace the ribbon cassette and roll paper, then close the printer cover.

NOTE: If you are troubled with reloading the paper, the cutter blade may not be in its normal position. Insert a screw driver into the hole at the bottom side of auto cutter unit as shown followed picture, and turn the gear inside the cutter unit to move the cutter blade to its normal position.

